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Research Monograph # 9

Combined Grades Classrooms

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How can teachers optimize learning in combined grade classrooms?

Research Tells Us

- **Students in combined grade classrooms achieve as well academically as those in single grade classrooms.**
- **Students appear to benefit from the spirit of co-operation and mutual help that exists in these settings.**
- **Whole-class strategies such as explicit instruction, co-operative learning and subject integration support improved learning in combined grade classrooms.**

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Combined grades include children from two or more consecutive grades in one classroom, with one teacher.[1] This type of classroom is very common on both a global[2] and local scale – in Ontario, approximately 21 per cent of classes fall into this category.[3] Combined grades are generally found in school systems with specific objectives for each grade level. For this reason, combined grades are different from the multi-age model promoted in certain environments in the U.S. and Australia as a way to focus instruction on individual development.[4] The division in groups by age is, historically, a rather recent phenomenon, dating back to the industrial revolution.[5]

Synopsis of the Research Literature

In this monograph, the important question of *how to optimize learning in a combined grade class* is addressed.[6,7,8,9,10,11,12] A great deal of research has been done on the impact of combined grades on academic achievement and psychosocial development.[6,7,8] Less research, however, has focused on how these classes function – the levels and ages of students, the gaps between them, the numerical balance of the levels and the perceptions of students.[7,11,13] Existing studies converge on what the ideal practices are in combined grades settings, although we are far from having a body of professional data that has been tested, understood and implemented widely in schools and classrooms.[6,7,10] Research which focuses on the impact of specific practices is even rarer.[2]

Research indicates that students in combined grades classrooms achieve the same level of academic results as those in single grade classes. Some researchers believe that this occurs as a result of student selection as well as effective teaching.[14,15] Others think that, given their diverse make-up, students in combined grades classes would achieve even better results if they were provided with an education built on the diversity of the combined grades setting.[6,7]

Some researchers have noticed that teaching in combined grades is often done in a back and forth fashion – teaching one level while assigning individual work to the other level. This practice raises two separate concerns.[7,14] Using this strategy, teachers may try to teach each level too quickly, thereby failing to promote understanding or to motivate students adequately. As a result, students' individual work

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may be inefficient. As well, teaching by alternation may isolate students by level, failing to build on the benefits of interacting with individuals of various ages and levels of development.

Key Strategies

- ***Explicit instruction*** **builds skills that are key to learning through practice and follow-up.**
- ***Co-operative learning*** **helps to build the classroom as a learning community where students share responsibility for one another's development.**
- ***Subject integration*** **enables teachers to tailor the relevance and length of learning activities to the different grade and performance levels within the classroom.**

Effective Strategies for Combined Grades

In combined grades classes, multiple programming, diverse student needs and gaps between knowledge levels place greater importance in combined grades classes on efficient instructional strategies.[5,13] Some researchers recommend working at the level of the entire class and practising such strategies as explicit instruction, co-operative learning and mentoring.[5,6,7,10,15] They also recommend planning across the curriculum and integrating various subjects.[5,6,7,13,15] A study involving some 50 Ontario teachers found co-operative learning, tutoring and subject integration to be relevant and effective strategies in a combined grades setting.[20]

1. Explicit Instruction

Explicit instruction is done in three stages: modelling, guided practice and independent practice. Research attributes the efficacy of this strategy to immediate student practice and follow-up by the teacher.[16] Explicit teaching is an investment in basic skill development (e.g., information processing). Each stage of the process is important. The first consists in presenting the subject sequentially and logically using various means, including demonstration. The teacher tries to make his/her reasoning explicit, explaining the how, what, why, where and when of the process. The second stage includes closely monitored tasks for students to do, similar to those presented during modelling. During the third stage, students integrate what they have learned through independent practice, making newly acquired knowledge automatic and freeing their working memory for more complex tasks.

2. Co-operative Learning/Tutoring

Although co-operative learning is a well-known strategy, it may be helpful to revisit the central aspects: direct interaction, interdependence, individual accountability, development of social skills and analysis of how the group works.[21,22] In co-operative learning, the reward structure, "All for one and one for all!" is also key. For example, when asking students to develop an algorithm, the teacher might introduce a structure such as "numbered heads" and require all the members of the team to master it. (No one knows which member of the team the teacher will ask to explain the algorithm.) Moreover, research recommends the use of various groupings – heterogeneous groups rather than just homogeneous groups.[23] This may be accomplished by grouping students by various levels, including performance levels, regardless of grade level.

Co-operation and mutual help in combined grade classes bring many benefits.[17] Students are more motivated as members of a team than they are alone to face challenges or perform demanding tasks. They become models for one another, for example, through demonstration of the learning strategies they use. This is particularly true for older students who become models for the younger ones, helping them develop their oral communication skills in real situations – an important benefit for ELL students and students in French-language schools who have few occasions to speak French outside school, and is an efficient way to meet the expectations of curriculum guidelines. Finally, co-operative work encourages psychosocial development, supporting students' interpersonal relationships and formative social experiences.[18]

The appropriate methods and the necessary social skills must be taught and practised for this kind of work to be efficient. Moreover, the teacher must observe students to ensure that they are complying with the principles of co-operative learning.[18] Co-operative work, however, should not replace individualized teaching and follow-up.

Studies of tutoring show that the learning experience can be significant both for the student who explains a subject and for the student who listens.[19] However, tutoring is more efficient when practised in order to help students apply new knowledge and skills rather than learn new matrial.

3. Subject Integration

Studies also stress the increased importance of careful planning and organization in combined grades classrooms. In order to optimize "time on task," the relevance and length of learning activities needs to be carefully considered.[12] For this purpose, subject integration is crucial. Subject integration requires knowledge of expectations and targeted content, and can be achieved on two levels. *Vertical integration* refers to the integration of expectations and content of different grade levels within the same subject; *horizontal integration* involves more than one subject within a grade level.[20]

Vertical integration is achieved first by distinguishing and then by teaching to the three levels of expectations and content in the curriculum: those which are *identical* across levels, those which are *progressive* and those which are *distinct*. *Identical* expectations and content, such as those related to basic reading and writing processes, can be addressed with the entire class. The *progressive* expectations and content, such as proceeding gradually in mathematics from concrete operations to more abstract ones, may be also addressed at the class level, at least in the introductory phase. Then pupils of the lower level can work on the new concept or skill in dyads while the teacher moves on with the older group. Finally, several approaches (e.g., projects, investigations, case studies, problem solving) enable the learning of *distinct* expectations by grouping them around a unifying skill or concept. For example, in English class, Grades 6 and 7 students could study the newspaper together and compare the journalist's report to the editorial comment. Then, the Grade 6 students could work on the report while the Grade 7 students work on the editorial comment. This task could be integrated with the history of Canada, with the students setting their writing in the historical periods they are studying. This method increases exchanges and co-operation and reduces teaching in a back-and-forth manner.

Creating a Learning Community

A challenge for students in combined grades classrooms is to develop an *esprit de corps* and a positive attitude toward their peers and their work . Teachers can help by using co-operative classroom activities and by talking about how the combined grades classroom resembles a family where members share what they know and help one another. As well, the teaching of social skills, such as the ability to express disagreement in a positive way, can contribute to the development of this positive attitude. Autonomy is another important skill in combined grades classes, one that can be encouraged by the use of methods such as scoring keys and progress charts. The teacher needs to imbue in students a sense of responsibility for their own learning, promoting the leitmotif *work + appropriate strategies = success.*

Ideally, within any school these strategies would be taught from the first years and enhanced progressively as students move through the grades. The advanced social skills hence developed by students would help to make each class, single grade or combined grade, a real "learning community."

Another combined grades resource

Combined Grades:
Strategies to Reach a Range of Learners in Kindergarten to Grade 6

This resource, produced by the Literacy and Numeracy Secretariat, provides literacy and numeracy strategies to support teachers and administrators in the successful management of combined grades classrooms in Kindergarten to Grade 6.

It can be found online at http://www.edu.gov.on.ca/eng/literacynumeracy/combined.pdf

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